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Vandenberg

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(54) **BALE LOADER**

(76) **Inventor:** **Rex Vandenberg, P.O. Box 923, Picture Butte, AB (CA), T0K 1V0**

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(58) **Field of Search** **414/24.5, 111, 414/789.7, 501, 489**

(56) **References Cited**

U.S. PATENT DOCUMENTS

4,242,028 * 12/1980 Van Dusen 414/320
 4,498,829 2/1985 Spikes .
 4,909,694 3/1990 Peters et al. .
 4,952,111 * 8/1990 Callahan 414/789.7
 4,971,504 11/1990 Klompier .

5,257,885 * 11/1993 Reil 414/24.5
 5,288,193 * 2/1994 Warburton et al. 414/24.5
 5,340,259 * 8/1994 Flaskey 414/24.5
 5,397,208 3/1995 Siebenga .
 5,405,229 * 4/1995 Tilley et al. 414/111
 5,478,194 12/1995 Tilley .
 5,507,612 4/1996 Siebenga .
 5,690,461 11/1997 Tilley .
 5,697,758 12/1997 Tilley .
 5,813,814 * 9/1998 Smart 414/111
 5,846,046 * 12/1998 Warburton 414/111

* cited by examiner

Primary Examiner—Joseph A. Fischetti

(74) *Attorney, Agent, or Firm*—Bennett Jones LLP

(57) **ABSTRACT**

A bale loading arm for use with a bale carrying vehicle includes a loading frame, a device for pivoting the loading frame, a pivot member, a device for rotating the pivot member, a bale grasper having a grasper arm and a device for rotating the grasper arm. The bale grasper includes a pair of opposed paddles, one of which is movable to receive and grasp a bale. The bale grasper, pivot member and loading frame are movable to grasp a bale lying on the ground and position it above the bale carrying vehicle where it may be released.

18 Claims, 12 Drawing Sheets

